REMARKS

Claims 14-27, 29-30, and 32 are all the claims presently pending in the application. This amendment is being submitted based on a telephonic interview between the Examiner, Jeffrey R. West and the undersigned attorney on January 5, 2005 and a subsequent telephonic communication from the Examiner on January 18, 2005. During the interview, discussions were conducted on correcting antecedent basis problems in the claims and determining whether the amended claim language contained matter requiring further consideration and/or a new search. Applicants contended that the proposed changes should not constitute a new issue as the amended language is derived from language previously considered by the Examiner, and has now simply been further defined for clarity and to more clearly correspond with the specification (substitute specification dated November 18, 2003). Nonetheless, this amendment is being submitted concurrently with a Request for Reexamination (RCE).

With respect to the Advisory Action of January 11, 2005, the Applicants have amended the claimed language to overcome the identified antecedent basis problems in the dependent claims and have further clarified the language pertaining to the "predetermined classes". Specifically, the "predetermined classes" have been defined as comprising "first and second classes".

Additionally, the step of "improving a classification accuracy of said decision fusion application based on said correct class" has been deleted in independent claims 14 and 20, and "means for improving a classification accuracy of said decision fusion application based on said correct class" has been deleted in independent claim 26. Initially, the improving step was added by the Applicants (in the amendment filed on April 19, 2004) in order to overcome a 35 U.S.C.

§101 rejection, where it was contended by the Examiner that the invention lacked practical application. However, it is the Applicants position that even without the improving step, and based on the subsequent amendments to the claims, the amended claimed subject matter would still have practical and useful application, wherein such practical and useful application involves a manner of classifying data samples by identifying a correct class (as defined by a class with a highest calculated combined log-likelihood value) associated with a particular data sample in a decision fusion application. In fact, during the interview on January 5, 2005, it was suggested by the Examiner that the language pertaining to a "decision fusion application" renders the claimed language to have a practical and useful application. Thus, Applicants assert that the claimed language does indeed meet the requirements of usefulness under 35 U.S.C. §101.

It is a well-known principle that a claimed invention only has to be operable and capable of satisfying some function which is of benefit to humanity in order to overcome the usefulness (or utility) requirement of 35 U.S.C. §101. *E.g.*, United States Steel Corp. v. Phillips Petroleum Co., 865 F.2d 1247, 9 U.S.P.Q.2d 1461 (Fed. Cir. 1989). Here, it is clear that the claimed invention is being used for data sample analysis in a decision fusion application, which is of particular usefulness in analyzing various forms of data such as audio and video data, as further presented in the dependent claims. Thus, the claimed invention is indeed useful and provides a benefit to humanity.

A prima facie case of utility requires that the Examiner show that the claimed invention does not conform to, or violates, well-known scientific principles that render the claimed objectives unattainable. However, clearly the claimed invention does not violate any well-known scientific principles, and the mathematical formulations presented in the specification of

the application further illustrate that the claimed objectives are in fact attainable and conform to mathematical principles. In Standard Oil Co., v. Montedison, S.p.A., 664 F.2d 356, 212 USPQ 327, 343 (3d Cir. 1981) (citing In re Hafner, 410 F.2d 1403, 1406, 161 USPQ 783, 785-86 (C.C.P.A. 1969)) it was established that nonusefulness or nonutility is determined by whether a person of ordinary skill in the art would have reason to question the truth of the applicant's statements relative to utility. In fact, In re Langer, 503 F.2d 1380, 183 USPQ 288 (C.C.P.A. 1974) established that with regard to proof of the utility of an invention, the United States Patent and Trademark Office generally assumes that an invention is operable as disclosed and that the burden of proving utility shifts to the applicant only if there is a reasonable doubt as to the truth of the applicant's assertions. Here, a person of ordinary skill in the art would not have reason to question the truth of the applicant's statements relative to utility as the applicant's claims are fostered by mathematical proofs and equations, as provided in the specification.

Generally, the claims have been amended to remove all antecedent basis problems, vagueness problems under 35 U.S.C. §112, second paragraph, and to remove any problems involving the utility requirement under 35 U.S.C. §101. Furthermore, claims 28 and 31 have been canceled without prejudice or disclaimer. In view of the foregoing, Applicants submit that claims 14-27, 29-30, and 32, all the claims presently pending in the application, are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to

discuss any other changes deemed necessary. Please charge any deficiencies and credit any overpayments to Attorney's Deposit Account Number 09-0441.

Respectfully submitted,

Dated: January 28, 2005

Mohammad S. Rahman
Reg. No. 43,029
McGinn & Gibb, P.L.L.C.
2568-A Riva Road, Suite 304
Annapolis, MD 21401
Voice: (301) 261-8625
Fax: (301) 261-8825
Customer Number: 29154